Amendments to the Specification:

Page 4, kindly replace the paragraph on lines 13-28, with the following:

-- Alternatively, the control means may be arranged to switch the z-lens, or more generally the ion optics, from the first mode to the second mode when the detector is approaching or experiencing saturation and/or to switch the z-lens, or more generally the ion optics, from the second mode to the first mode when a higher sensitivity is possible without the detector substantially saturating in the first mode. According to the preferred embodiment, low mass peaks may be ignored in the determination of whether or not to switch sensitivities and in one embodiment it is only if mass peaks falling within a specific mass to charge range (e.g. $m/z \geq 50$, or 75, or 100) saturate or approach saturation that the control means switches sensitivity modes. Additionally/alternatively to ignoring saturation of low mass peaks and concentrating on mass peaks in one or more specific mass ranges (which are preferably predefined, but in less preferred embodiments do not necessarily need to be), the control means may switch sensitivity modes based upon whether specific, preferably predetermined, mass peaks are approaching saturation or are saturated, or if an improved mass spectrum including that specific mass peak could be obtained by switching to a different sensitivity mode. --